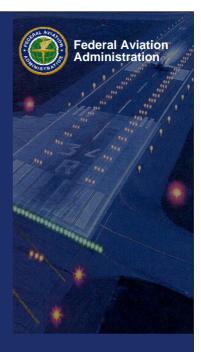
Airport Congestion ARPT-1 New and Extended Runways



Michael O'Harra & Ben DeLeon May 2006

ARPT-1 New and Extended Runways

- Key contributors to capacity growth and improvements in throughput within the NAS
- FAA established commitment and accountability for critical new runway projects in 2001. This commitment is renewed each year through the Agency Flight Plan:
 - "Ensure that all necessary facilities, equipment, procedures, airspace changes, and staffing are in place at the time needed to meet new runway capability commitments established in partnership with stakeholders"

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Notes:

New runways, runway extensions and airfield reconfigurations are key contributors to capacity growth and improvements in throughput within the National Airspace System

Runway Template Action Plan (RTAP) Airspace & Procedures Planning Environmental Design Construction Runway Open for Use Foc Horizontal Integration

- Cross-organizational effort to help FAA and stakeholders collaboratively manage complex projects
- Comprehensive, consistent generic runway project schedule applied individually to each runway project
- Accountable organization, dates and interdependencies are defined at the task level
- Schedule spans from initial planning through delivery of full operational capability commitment
- Integrates systems checklists and schedules for all required facilities

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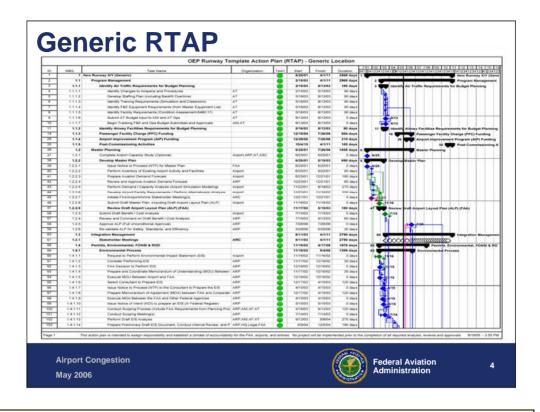
Notes:

We use the Runway Template Action Plan (RTAP) process to help manage these commitments. The RTAP creates a project-specific schedule of activities that is used at regular meetings of stakeholders, including FAA, airlines, and the airport sponsor. The RTAP identifies a consistent approach to building new runways, and clearly communicates the expectations and accountability for all stakeholders.

- •Defines accountable organization, dates and interdependencies for each task
- •Spans from initial planning through runway commissioning
- •Integrates systems checklists and schedules for all required facilities

Scope:

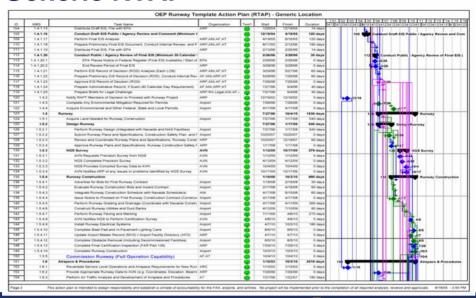
- •"...all necessary facilities, equipment, procedures, airspace changes, and staffing in place..."
- Any activities or waivers required to meet the Full Operational Capability commitment
- •The expectation that stakeholders will establish a schedule for their activities and periodically report progress and any issues to the Agency



Notes:

As an example the RTAP for the new runway in Denver has:

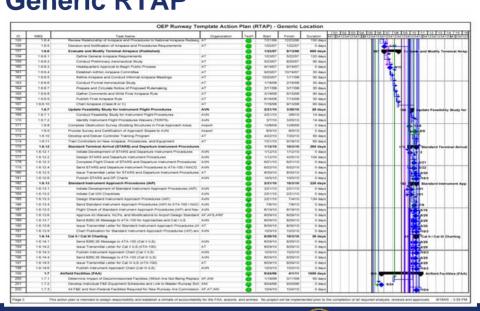
- 290 tasks assigned to a dozen FAA organizations as well as to airport and airline stakeholders, including 364 task interdependencies
- •Here we see the first set of the highest level tasks in the RTAP...Master Plan, Environmental, Design, various budgeting and survey activities....
- ...and then we see the next set of construction activities, tasks associated with developing, approving and charting procedures, training, and commissioning the runway....
- ...and finally we see a detailed look at one of the schedules for a system that is critical to full operational capability
- •As you view the following four pages, you can see the level of detail provided in the schedule (funding, design, site survey, land leases, environmental, construction, installation, testing, training, flight inspection, and commissioning).
- You can imagine that, before the RTAP, it was difficult to identify the relationships between tasks (which often cross organizational boundaries) or to track the critical path for the entire runway project.



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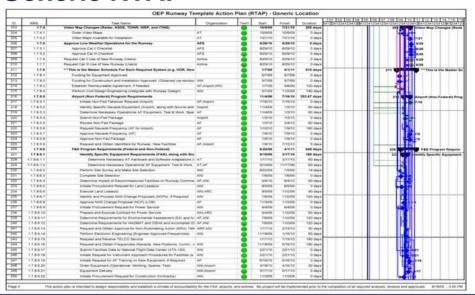
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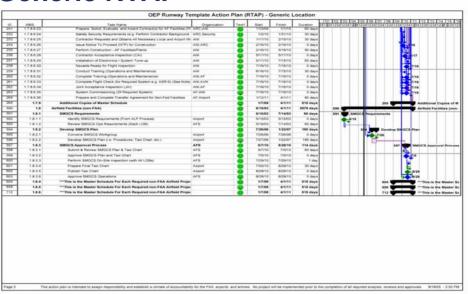




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ARPT-1: New and Extended Runways

- Criteria for New and Extended Runways in the OEP
 - Must be at one of 35 OEP airports
 - Agreement (FAA and Airport Sponsor) on dimensions, timing, alignment, and planned use of the runway
 - Environmental Impact Statement Record of Decision (ROD) issued
- RTAP Coordination (OEP Associates Team, Horizontal Integration Team, and stakeholders)
 - Runway commissioning date and "full operational capability" definitions establish the OEP RTAP commitment
 - Ongoing quarterly RTAP program management cycles
 - · Progress compared against commitments
 - · Proposed schedule changes are discussed
 - The team works together to identify and minimized any impacts

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Notes:

Criteria:

- •Runway must be at one of the 35 OEP airports
- •The FAA and Airport Sponsor must have agreement on the dimensions, timing, alignment, and planned use of the runway
- •There must be an EIS Record of Decision issued for the project

Upon agreement of OEP Associates Team, Horizontal Integration Team (HIT team), and stakeholders, the runway commissioning date and "full operational capability" definitions establish the OEP RTAP commitment

Ongoing RTAP Program Management Cycles are conducted quarterly, in partnership with Airport Sponsor and Airline stakeholders

- •Progress on an extensive set of tasks is compared against commitments
- Accomplished tasks are reported as completed
- •Issues and proposed schedule changes are discussed in a corporate environment so any associated impacts can be identified and minimized
- •Any unresolved issues are documented and elevated

RTAP Successes

- Better understanding of the process; fewer surprises
- Cross-organizational teams with common goals and team leaders focused on the big picture
- Advanced planning, coordination and budgeting, with linkages to Flight Plan
- Clear communication of expectations
- Accountability for commitments (Failure is not an option)
- Ongoing reviews to evaluate results
- Early identification of issues and corporate development of mitigation strategies
- Strong support from the highest management levels
- Since RTAPs were created 4 ¾ years ago, no runway commissioning date changes caused by FAA activities

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ARPT-1 Changes Since OEP v7

- Dulles runway 1L/19R returned to OEP after Record of Decision (ROD) was issued
- First new O'Hare Modernization Program runway
 9L/27R added to OEP
- OEP runway focus expanded to include delay reduction and safety initiatives
 - LAX runway 7R/25L and new center taxiway
 - PHL runway 17/35 extension

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Notes:

IAD: New runway 1L/19R will allow dependent approaches under CAT I IFR conditions upon runway commissioning on 11/20/08. The runway will be upgraded to Cat II/III upon successful completion of the ILS burn-in requirement.

ORD:

- 11/08: New runway 9L/27R commissioned with Cat I on both ends and with interim Air Traffic procedures / infrastructure in place to utilize the runway until the North ATCT is commissioned (Interim Operational Capability)
- 07/09: Target for completion of Cat II/III burn-in and commissioning of Cat II/III ILS on both ends of runway 9L/27R
- 10/09: North ATCT commissioned, providing maximum runway utilization efficiency (Full Operational Capability)

LAX:

- \bullet The runway 7R/25L relocation is to accommodate construction of a center taxiway for increased safety.
- No changes to runway capacity, installed navigation, or procedures are planned.
- The runway will commission with Cat I capability on 1/18/07 and will be upgraded to Cat II/III upon successful completion of the ILS burn-in requirement.

PHL: The runway extension will allow precision approaches to Rwy 17 and VFR approaches to Rwy 35 on 12/20/07.



Progress

- 4 Record of Decisions Issued: FY05 & Early FY06
 - Philadelphia (PHL) Extension April 2005
 - Los Angeles (LAX) Reconfiguration May 2005
 - Chicago O'Hare (ORD) Reconfiguration Sept 2005
 - Washington Dulles (IAD) October 2005

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Accomplishments

- 12 new runways opened in last 7 years
 - 20 miles of pavement
 - Potential to accommodate almost 1.4 million more operations
 - Decrease average delay per operation by about 4 minutes
- 6 runway projects to open in next 3 years
 - 8 more miles of pavement
 - Potential to accommodate about 578,000 more operations
- 7 with Planning/Environmental Underway
 - 4 EISs underway or beginning shortly
 - 3 Planning Studies underway

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Notes:

In last 7 years, 11 new runways have opened.

19 miles of pavement

Potential to Accommodate almost 1.4 million more operations

Decrease average delay per operation by about 4 minutes

Currently, there are 7 OEP projects underway including:

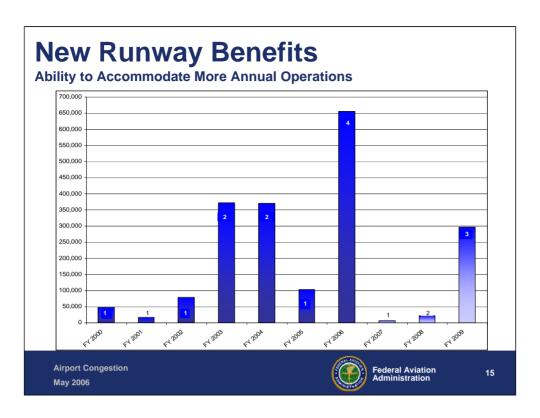
5 New Runways, 1 Extension, & 1 Replacement

Of these 7, 5 are under construction & 2 will begin construction shortly

The next wave of projects include

5 Environmental Impact Studies (EISs) underway or will be shortly: FLL, PHL, CLT, Peotone, and Ivanpah

2 Planning Studies: Portland (extension), San Diego



Notes:		
	Runways	
<u>Year</u>	Commissione	ed Location
FY 2000	1	PHL
FY 2001	1	PHX
FY 2002	1	DTW
FY 2003	2	DEN, MIA
FY 2004	2	IAH, MCO
FY 2005	1	CLE
FY 2006	4 N	MSP, CVG, STL, ATL
FY 2007	1	BOS
FY 2008	2	PHL, LAX
FY 2009	3	SEA, IAD, ORD